

ABSTRACT

This silicon wafer is obtained from a silicon single crystal grown by the CZ method in a hydrogen-containing inert gas atmosphere, and is a completely grown-in defect-free wafer containing no COPs or dislocation clusters throughout the wafer in the thickness and radial directions thereof, and all the portions consist essentially of an interstitial rich region. This method for growing silicon single crystals includes pulling a silicon single crystal in a hydrogen-containing inert gas atmosphere so as to expand the range of the pull rate for the PI region, wherein the pulling of the silicon single crystal is conducted at a pull rate within this expanded range of the pull rate for the PI region so as to grow a body portion that is an interstitial rich region.